



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2017-0967; Product Identifier 2017-NE-35-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; GE Aviation Czech s.r.o. Turboprop Engines**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Supplemental Notice of proposed rulemaking (SNPRM); reopening of comment period.

**SUMMARY:** The FAA is revising an earlier proposal for all GE Aviation Czech s.r.o. M601D-11, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601F, H80, H80-100, H80-200, H75-100, H75-200, H85-100, and H85-200 turboprop engines. This action revises the notice of proposed rulemaking (NPRM) by revising the compliance time requirements for replacement of affected engine outlet system hardware. The FAA is proposing this airworthiness directive (AD) to address the unsafe condition on these products. At the request of some commenters, the FAA is reopening the comment period to allow the public the chance to comment on these changes.

**DATES:** The comment period for the NPRM published in the Federal Register on January 24, 2018 (83 FR 3287), is reopened.

The FAA must receive comments on this SNPRM by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12 140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this SNPRM, contact GE Aviation Czech s.r.o., Beranových 65, 199 02 Praha 9 – Letňany, Czech Republic; phone: +420 222 538 111; fax: +420 222 538 222. You may view this service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA, 01803. For information on the availability of this material at the FAA, call 781-238-7759.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0967; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this SNPRM, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Barbara Caufield, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7146; fax: 781-238-7199; email: [barbara.caufield@faa.gov](mailto:barbara.caufield@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2017-0967; Product Identifier 2017-NE-35-AD” at the

beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this SNPRM. The FAA will consider all comments received by the closing date and may amend this SNPRM because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact received about this proposed AD.

### **Confidential Business Information**

Confidential Business Information (CBI) is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this SNPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this SNPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as "PROPIN." The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this SNPRM. Submissions containing CBI should be sent to Barbara Caufield, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

### **Discussion**

The FAA issued an NPRM to amend 14 CFR part 39 by adding an AD that would apply to all GE Aviation Czech s.r.o. M601D-11, M601E-11, M601E-11A, M601E-

11AS, M601E-11S, M601F, H75-100, H75-200, H80, H80-100, H80-200, H85-100, and H85-200 turboprop engines. The NPRM published in the Federal Register on January 24, 2018 (83 FR 3287). The NPRM was prompted by a review by the manufacturer that identified the possibility of a power turbine (PT) rotor overspeed and the uncontained release of PT blades. The NPRM proposed to require installing a modified engine outlet system.

The European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2017-0151R1, dated December 5, 2018 (referred to after this as “the MCAI”), to address the unsafe condition on these products. The MCAI states:

A recent design review identified the possibility of failure of the power turbine (PT) or quill shaft splines.

This condition, if not corrected, could lead to a PT rotor overspeed, with consequent release of PT blade(s), possibly resulting in high energy debris and damage to, and/or reduced control of, the aeroplane.

To address this potential unsafe condition, GE Aviation Czech (GEAC) designed a modification (mod) of the engine outlet system and issued the ASB, later revised, providing instructions for modification of engines in service, and EASA issued AD 2017-0151, requiring modification of the affected engines, and prohibiting installation of pre-mod parts.

Since that [EASA] AD was issued, GEAC completed a TBO extension program, and revised the ASB (now at Revision 03) and the applicable EMM accordingly.

For the reasons stated above, this [EASA] AD is revised to include reference to the revised EMM.

You may obtain further information by examining the MCAI in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0967.

#### **Actions Since the NPRM was Issued**

Since the FAA issued the NPRM, GE Aviation Czech s.r.o. has revised its service information. GE Aviation Czech s.r.o. published GE Aviation Alert Service Bulletin (ASB) ASB-M601E-72-00-00-0070[03], ASB-M601D-72-00-00-0053[03], ASB-M601F-72-00-00-0036[03], ASB-M601T-72-00-00-0029[03], ASB-M601Z-72-00-00-0039[03], ASB-H75-72-00-00-0011[03], ASB-H80-72-00-00-0025[03], and ASB-H85-72-00-00-0007[03] (single document), dated July 24, 2018. In addition, EASA has revised its AD to incorporate changes from the revised ASB in EASA AD 2017-0151R1, dated December 5, 2018.

#### **Comments**

The FAA gave the public the opportunity to comment on the NPRM. The following presents the comments received on the NPRM and the FAA's response to each comment.

#### **Request to Exempt Part 137 Operators**

Thrush Aircraft, Inc., Swing Wing, Inc., and an individual commenter requested that the proposed rule exempt from its applicability section 14 CFR Part 137 restricted category agricultural operators. The commenters stated that the proposed rule would have no significant effect on improving safety. They further commented that documented single engine uncontained events caused minor damage or penetrations to the engine nacelle and did not affect any primary structure of the aircraft or any aircraft systems.

The FAA partially agrees. The FAA agrees with the commenter that there may be events in which an engine uncontainment does not have a hazardous effect on the aircraft or its occupant. There is still a risk of total loss of engine power and damage to the aircraft. The FAA disagrees with removing 14 CFR Part 137 operators of restricted agricultural category aircraft from the applicability section of the proposed AD. The FAA considers an uncontained engine failure an unsafe condition regardless of the aircraft type on which the engine is installed.

#### **Request to Consider Rule Significant**

Swing Wing, Inc., Thrush Aircraft, Inc., and an individual commenter requested that the FAA consider the proposed rule a significant regulatory action under Executive Order 12866 and a significant rule under the DOT Regulatory Policies and Procedures. The commenters stated that the cost to comply with the required actions of this AD will be much higher than what is shown in the economic costs section of the proposed AD since it did not consider lost revenue.

The FAA disagrees. The estimated costs set forth in the NPRM and in this supplemental NPRM do not rise to the level of a “Significant regulatory action” as defined in Executive Order 12866 or under DOT Regulatory Policies and Procedures.

#### **Request to Consider Rule Significant Effect on Small Businesses**

Swing Wing, Inc., Thrush Aircraft, Inc., and an individual commenter noted that the proposed rule would have a significant effect on small businesses. The commenters asked that the FAA therefore consider the economic impact of the proposed rule.

In accordance with the Regulatory Flexibility Act, the FAA must perform a review to determine whether a rule will have a significant economic impact on a substantial number of small entities. Within this preamble, the FAA is publishing its initial Regulatory Flexibility Analysis.

### **Request to Delay Rule Implementation**

Swing Wing, Inc. and Thrush Aircraft, Inc. requested that the FAA delay implementation of this proposed rule by 24 to 36 months. The commenters requested that the FAA analyze the effective date of the AD to determine how it would affect 14 CFR part 137 operators. The commenters indicated that a delay of 24 to 36 months in the effective date would be commensurate with the compliance times in Table 1 of paragraph (g) as originally proposed by the engine manufacturer. The commenters further state that a delay of 24 to 36 months would allow operators to plan, schedule, and budget for accomplishing the required actions of the AD.

The FAA disagrees. Delaying the implementation of the AD by 24 to 36 months would not be consistent with the safety objectives of the rule.

### **Request to Revise Compliance Time**

GE Aviation Czech s.r.o. requested the FAA revise the compliance time to remove the 6,600 engine equivalent cycles since new or since last overhaul requirement. GE Aviation Czech s.r.o. indicated it had held discussions with Thrush Aircraft, Inc. and EASA to remove the 6,600 engine equivalent cycle removal requirement and EASA has revised their AD to do the same.

The FAA agrees to remove the 6,600 engine equivalent cycles removal requirement. GE Aviation Czech s.r.o. has revised its Service Bulletin to remove the 6,600 engine equivalent cycles removal requirement. EASA also published a revised AD 2017-0151R1, dated December 5, 2018, that removes the 6,600 engine equivalent cycles requirement. The FAA revised the compliance requirements in this proposed rule by removing the 6,600 engine equivalent cycles removal requirement.

### **Revision to Compliance Requirement**

In addition, GE Aviation Czech s.r.o. and EASA revised the compliance time requirements in their ASB and AD, respectively, by adding a reference to removing

affected parts within the compliance times identified in the Airworthiness Limitations Section (ALS) of the applicable engine manual. The FAA revised the compliance requirements in this proposed rule by adding a similar reference.

#### **Revision to Cost Estimate**

The FAA reduced the number of estimated engines affected from 167 in the NPRM to 42 in this SNPRM. The FAA is basing this estimate on the number of affected airplanes listed in the FAA's Aircraft Registry Database.

#### **Related Service Information Under 1 CFR Part 51**

The FAA reviewed GE Aviation ASB ASB-M601E-72-00-00-0070[03], ASB-M601D-72-00-00-0053[03], ASB-M601F-72-00-00-0036[03], ASB-M601T-72-00-00-0029[03], ASB-M601Z-72-00-00-0039[03], ASB-H75-72-00-00-0011[03], ASB-H80-72-00-00-0025[03], and ASB-H85-72-00-00-0007[03] (single document), dated July 24, 2018. The ASB describes procedures for removal and replacement of the engine outlet system hardware. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

#### **FAA's Determination**

This product has been approved by the aviation authority of the Czech Republic and is approved for operation in the United States. Pursuant to our bilateral agreement with the European Community, EASA has notified us of the unsafe condition described in the MCAI and service information referenced above. The FAA is proposing this AD because the agency evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.



## **Proposed Requirements of this SNPRM**

This SNPRM would require replacement of the affected engine outlet system hardware.

## **Costs of Compliance**

The FAA estimates that this proposed AD affects 42 engines installed on airplanes of U.S. registry.

The FAA estimates the following costs to comply with this proposed AD:

### **Estimated Costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Replace exhaust system parts	64 work-hours x \$85 per hour = \$5,440	\$63,000	\$68,440	\$2,874,480

## **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In

accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to engines, propellers, and associated appliances to the Manager, Engine and Propeller Standards Branch, Policy and Innovation Division.

### **Regulatory Flexibility Determination**

The Regulatory Flexibility Act of 1980 (Pub. L. 96-354, codified as amended at 5 USC §§ 601-612) (RFA) establishes “as a principle of regulatory issuance that agencies shall endeavor, consistent with the objectives of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the businesses, organizations, and governmental jurisdictions subject to regulation. To achieve this principle, agencies are required to solicit and consider flexible regulatory proposals and to explain the rationale for their actions to assure that such proposals are given serious consideration.” Pub. L. 96-354, § 2(b), Sept. 19, 1980. The RFA covers a wide-range of small entities, including small businesses, not-for-profit organizations, and small governmental jurisdictions. Agencies must perform a review to determine whether a rule will have a significant economic impact on a substantial number of small entities. If the agency determines that it will, the agency must prepare a regulatory flexibility analysis as described in the RFA.

Compliance cost of this proposed AD comes from the removal and replacement of the exhaust system parts. Estimated compliance cost per engine is identified below.

Labor cost = 64 repair hours per engine \* \$85 Mean Hourly Wage = \$5,440.

Cost of Parts = \$63,000 per engine (Source: GE Aviation Czech).

\$5,440 labor per engine + \$63,000 parts per engine = \$68,440 compliance cost per engine.

To estimate the revenue impacts of the proposed AD on these 38 small operators, the FAA used the total estimated one-time costs of compliance per each engine (\$68,440) and divided it by the estimated annual revenue of each entity (\$700,000). The FAA determined all 38 small businesses that would be affected by this proposed AD would experience impacts of approximately 9 percent of their annual revenue during the implementation of this AD ( $\$68,440 \div \$700,000$ ).

### **Initial Regulatory Flexibility Analysis**

Under Section 603(b) and (c) of the RFA, the initial analysis must address the following six areas:

- (1) Description of reasons the agency is considering the action;
- (2) Statement of the legal basis and objectives for the proposed rule;
- (3) Description of the record keeping and other compliance requirements of the proposed rule;
- (4) All federal rules that may duplicate, overlap, or conflict with the proposed rule;
- (5) Description and an estimated number of small entities to which the proposed rule will apply; and
- (6) Describe alternatives considered.

### **Reasons the Agency is Considering the Action**

This proposed AD was prompted by a review by the manufacturer that identified the possibility of a PT overspeed and the uncontained release of PT blades. The FAA is proposing this AD to prevent uncontained release of the PT blades. This proposed AD would require installing a modified engine outlet system. The unsafe condition, if not addressed, could result in failure of the PT blades, uncontained release of the blades, damage to the engine, and damage to the airplane

## **Legal Basis and Objectives for the Proposed Rule**

The FAA's legal basis for this proposed AD is discussed in detail under the "Authority for this Rulemaking" section.

## **Description and an Estimated Number of Small Entities to Which the Proposed Rule Would Apply**

This proposed AD would apply to all GE Aviation Czech s.r.o. M601D-11, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601F, H75-100, H75-200, H80, H80-100, H80-200, H85-100, and H85-200 turboprop engines. These engines are typically installed on airplanes that are owned and operated by aerial application businesses, which is a small segment of the aviation industry. These airplanes, also known as "crop-dusters," spread fertilizer, insecticides, fungicides, and weed killers.<sup>1</sup>

The FAA searched the 2018 Aircraft Registration database that contains the records of all U.S. Civil Aircraft maintained by the FAA's Aircraft Registration Branch and identified 42 airplanes with GE H80 series engines or equivalent turboprop engines installed. The Aircraft Registration database shows that 38 companies own these 42 airplanes--4 companies own 2 airplanes, while the remaining 34 companies own 1 airplane each. Based on these registration records, the FAA assumes that approximately each entity or business owned one airplane.

By using the Small Business Administration (SBA)'s size standards and the North American Industry Classification System (NAICS) code classifications, the FAA is able to determine whether a business is small or not. These entities would operate under NAICS code 115112, Soil Preparation, Planting, and Cultivating. The size standards for this NAICS code as provided by SBA's Size Standards Table<sup>2</sup> is \$7.5 million in annual

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<sup>1</sup> "Flying Low Is Flying High As Demand for Crop-Dusters Soars", by Jonathan Welsh, updated Aug. 14, 2009: <https://www.wsj.com/articles/SB125020758399330769>. Accessed on July 26, 2019.

<sup>2</sup> [https://www.sba.gov/sites/default/files/files/Size\\_Standards\\_Table.pdf](https://www.sba.gov/sites/default/files/files/Size_Standards_Table.pdf) Accessed on July 26, 2019.

revenues. Therefore, entities generating less than \$7.5 million in annual revenues would be treated as small businesses for the purposes of this analysis.

The FAA assumes that all 38 operators above that would be affected by this proposed AD are small businesses because \$700,000 annual revenue for a first-class, used turbine agricultural aviation plane<sup>3</sup> is a reasonable industry estimate. On average, entities operating in the aerial application industry would generate approximately \$700,000 each year (\$700,000 x 1 crop-duster airplane), which is below \$7.5 million revenue size standards for NAICS code 115112. Therefore, the FAA assumes all 38 registered company owners or operators to be small entities.

#### **Record-Keeping and Other Compliance Requirements of the Proposed Rule**

There are no record-keeping costs associated with this proposed rule.

#### **Duplicative, Overlapping, or Conflicting Federal Rules**

There are no relevant Federal rules that may duplicate, overlap, or conflict with this proposed rule.

#### **Alternatives to the Proposed AD**

There is no direct safety alternative to the modification of the engine outlet system. The modification addresses a safety issue aimed at preventing an uncontained release of the PT blades.

#### **Regulatory Findings**

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

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<sup>3</sup> "How much does it cost?" by Bill Lavender, April 3, 2017. <https://agairupdate.com/how-much-does-it-cost/> Accessed on July 26, 2019.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866, and
- (2) Will not affect intrastate aviation in Alaska.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**GE Aviation Czech s.r.o. (Type Certificate previously held by WALTER Engines a.s., Walter a.s., and MOTORLET a.s.);** Docket No. FAA-2017-0967; Product Identifier 2017-NE-35-AD.

#### **(a) Comments Due Date**

The FAA must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

- (1) This AD applies to all GE Aviation Czech s.r.o. M601D-11, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601F, H75-100, H75-200, H80, H80-100, H80-200, H85-100, and H85-200 turboprop engines.

(2) These engines are known to be installed on, but not limited to, Thrush Aircraft, Inc. (formerly Quality, Ayres, Rockwell) S-2R, PZL “Warszawa-Okęcie” PZL-106 (Kruk), Air Tractor AT-300, AT-400 and AT-500 series, Allied Ag Cat Productions, Inc. (formerly Schweizer, Grumman American) G-164 series, RUAG (formerly Dornier) Do 28 and Aircraft Industries (formerly LET) L-410 airplanes.

**(d) Subject**

Joint Aircraft System Component (JASC) Code 7810, Engine Collector/Tailpipe/Nozzle.

**(e) Unsafe Condition**

This AD was prompted by a review by the manufacturer that identified the possibility of a power turbine (PT) overspeed and the uncontained release of PT blades. The FAA is issuing this AD to prevent uncontained release of the PT blades. The unsafe condition, if not addressed, could result in failure of the PT blades, uncontained release of the blades, damage to the engine, and damage to the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Required Actions**

(1) After the effective date of this AD, replace the parts listed in Tables 2 through 5 to paragraph (g) of this AD with the parts identified in Planning Information, Paragraph 1.5, Sections I through IV, respectively in GE Aviation Alert Service Bulletin (ASB) ASB-M601E-72-00-00-0070 [03], ASB-M601D-72-00-00-0053 [03], ASB-M601F-72-00-00-0036 [03], ASB-M601T-72-00-00-0029 [03], ASB-M601Z-72-00-00-0039 [03], ASB-H75-72-00-00-0011 [03], ASB-H80-72-00-00-0025 [03], and ASB-H85-72-00-00-0007 [03] (single document), dated July 24, 2018, using the criteria below, whichever occurs first:

(i) during the next engine shop visit,

- (ii) within the compliance time identified in the applicable Airworthiness Limitations Section of the existing maintenance manual for the affected engine model, or
- (iii) within the compliance time, in years after the effective date of this AD, shown in Table 1 of this AD.

**Table 1 to Paragraph (g) – Compliance Times**

<b>Date of Engine Manufacture</b>	<b>Date of Release to Service after last Shop Visit</b>	<b>Compliance Time</b>
December 31, 2008 or before	Never subjected to engine shop visit	5 years
January 1, 2009 or later		10 years
any	February 9, 2014 or before	5 years
any	February 10, 2014 or later	10 years

**Table 2 to Paragraph (g) – Exhaust Systems M601-4.2, M601-4.5, M601-4.51, M601-4.52, M601-4.61, and M601-4.62**

<b>Engine models</b>	<b>Part Name</b>	<b>Part Number (P/N)</b>
M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601F, H75-100, H75-200, H80, H80-100, H80-200, H85-100, and H85-200	Containment Ring	M601-426.5
	Insulation Cover	M601-422.3, M601-422.2
	Supporting Cone	M601-457.7, M601-457.3
	Support	M601-4512.5

**Table 3 to Paragraph (g) – Exhaust System M601-4.1, M601-4.6, and M601-4.7**

<b>Engine models</b>	<b>Part Name</b>	<b>P/N</b>
M601D-11, M601E-11, M601E-11A, M601E-11AS, M601E-11S	Containment Ring	M601-426.5
	Insulation Cover	M601-422.3, M601-422.2
	Support	M601-4512.5
	Supporting Cone	M601-457.7, M601-457.3
	Outlet Duct	M601-416.6

**Table 4 to Paragraph (g) – Countershaft Case Complete (Reduction Gearbox Subassembly) M601-62.2, M601-62.7, M601-60.3**

<b>Engine models</b>	<b>Part Name</b>	<b>P/N</b>
All	Bolt	M601-6170.9
	Ring	M601-6014.9



**Table 5 to Paragraph (g)– Torquemeter (Reduction Gearbox Subassembly)  
M601-673.6, M601-667.7, M601-605.3**

<b>Engine models</b>	<b>Part Name</b>	<b>P/N</b>
All	Torquemeter Holder	M601-643.9

(2) [Reserved]

**(h) Installation Prohibition**

(1) Do not install any part with a P/N listed in Tables 2 through 5 to paragraph (g) of this AD on any engine after that engine has been modified as required by paragraph (g)(1) of this AD.

(2) After the effective date of this AD, do not install a part with a P/N listed in Tables 2 through 5 of this AD on any engine manufactured on or after September 1, 2017.

**(i) Definition**

For the purpose of this AD, an engine shop visit is when the engine is overhauled or rebuilt, or the PT is disassembled.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ECO Branch, send it to the attention of the person identified in paragraph (k)(1) of this AD. You may email your request to: ANE-AD-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(k) Related Information**

(1) For more information about this AD, contact Barbara Caufield, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7146; fax: 781-238-7199; email: barbara.caufield@faa.gov.

(2) Refer to European Union Aviation Safety Agency (EASA) AD 2017-0151R1, dated December 5, 2018, for more information. You may examine the EASA AD in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating it in Docket No. FAA-2017-0967.

(3) For service information identified in this AD, contact GE Aviation Czech s.r.o., Beranových 65, 199 02 Praha 9 – Letňany, Czech Republic; phone: +420 222 538 111; fax: +420 222 538 222. You may view this referenced service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA, 01803. For information on the availability of this material at the FAA, call 781-238-7759.

Issued in Burlington, Massachusetts, on January 29, 2020.

Robert J. Ganley,  
Manager, Engine and Propeller Standards Branch,  
Aircraft Certification Service.

[FR Doc. 2020-02005 Filed: 2/3/2020 8:45 am; Publication Date: 2/4/2020]